

**MAIL TO:**

STATE OF UTAH  
 DIVISION OF PURCHASING  
 3150 STATE OFFICE BUILDING, CAPITOL HILL  
 P.O. BOX 141061  
 SALT LAKE CITY, UTAH 84114-1061  
 TELEPHONE (801) 538-3026  
<http://purchasing.utah.gov>

**Invitation to Bid**Solicitation Number: **PM5042**Due Date: **12/21/04 at 2:00 PM**

Date Sent: November 29, 2004

Goods and services to be

**SALT STORAGE BUILDING- PAROWAN UTAH****Must Complete**

Company Name		Federal Tax Identification Number	
Ordering Address	City	State	Zip Code
Remittance Address (if different from ordering address)	City	State	Zip Code
Type <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government	Company Contact Person		
Telephone Number (include area code)	Fax Number (include area code)		
Company's Internet Web Address	Email Address		
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)		
<p>The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, Terms and Conditions, and specifications. <u>Please review all documents carefully before completing.</u></p> <p>The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes_____ No_____. If no, enter where produced, etc._____</p>			
Offeror's Authorized Representative's Signature		Date	
Type or Print Name		Position or Title	

STATE OF UTAH  
DIVISION OF PURCHASING

Invitation to Bid

Solicitation Number: PM5042

Due Date: 12/21/04

Vendor Name:

Item#	Qty	Unit	Description	Unit Price	Extension
001	1	JOB	Salt Storage Building - Parowan Utah (per attached specifications)	\$	\$
<p>Project Description:</p> <p>This project is to build a new salt storage facility to be constructed at UDOT maintenance station 4526 in Parowan, Utah per this description and the attached drawings and specification.</p> <p>The scope of work includes the construction of a complete building per the requirements contained in the attached drawings and specification. The Owner will stake the location of the building and set the floor elevation. The Contractor will be responsible to verify all existing conditions prior to the bid. The Contractor will be responsible for construction of the building. The Owner will be responsible for floor subbase placement and asphalt paving. Except for work designated to be done by the Owner, the Contractor will be responsible for work done within the building footprint.</p> <p>It is recommended that potential bidders visit the site. Visits can be arranged through Ryan Orton, Station Supervisor, phone number (435) 477-3715. Questions regarding the specifications during the bid period can be addressed to William E. Jaszczak, phone number (801) 964-4522. All specification-related questions will be required to be submitted by one week before the bid date.</p> <p>For bid processing questions, please contact Paul F. Mash at (801) 538-3138.</p>					

**THIS IS A FORMAL BID, THEREFORE NO FAXED RESPONSES WILL BE ACCEPTED**

**REQUIREMENTS:**

INTERESTED CONTRACTORS MUST SUBMIT THEIR BID ON THE PROVIDED BID SHEET TO BE CONSIDERED RESPONSIVE. CONTRACTOR MUST BE A LICENSED CONTRACTOR IN THE STATE OF UTAH TO BID FOR THIS PROJECT. **A CONSTRUCTIONS TRADE LICENSING REQUIREMENTS FORM MUST BE SUBMITTED WITH EACH BID.**

**BONDS:**

A 5% BID BOND WILL BE REQUIRED AT THE TIME OF BID SUBMITTAL AND A 100% PERFORMANCE/PAYMENT BOND WILL BE REQUIRED OF THE SUCCESSFUL BIDDER. **A COMPLETED BOND STATEMENT MUST BE SUBMITTED WITH EACH BID.**

ANY MODIFICATION TO THIS PROCUREMENT EFFORT SHALL BE MADE IN WRITING BY ADDENDUM ISSUED BY THE STATE DIVISION OF PURCHASING. ONLY AUTHORIZED AND PROPERLY ISSUED ADDENDA SHALL CONSTITUTE THE OFFICIAL POSITION OF THE STATE AND SHALL BE BINDING. ANYONE SUBMITTING A RESPONSE TO THIS SOLICITATION, WITH BASIS IN OR ON OTHER COMMUNICATION OR INFORMATION RECEIVED FROM SOURCES OTHER THAN THROUGH OFFICIAL ADDENDUM, ASSUMES FULL RISK INCLUDING THE POSSIBILITY OF A DETERMINATION OF NON-RESPONSIVENESS AND MAY BE REJECTED AT THE SOLE DISCRETION OF THE STATE.

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REF: RX 810 55200000011  
COMMODITY: 90610

STATE OF UTAH  
DIVISION OF PURCHASING

Invitation to Bid

Solicitation Number: PM5042

Due Date: 12/21/04

Vendor Name:

Ship To: UDOT STATION 4526  
PAROWAN, UTAH

FREIGHT CHARGES

SHIPPING POINT AND ZIP CODE	
SHIPPING WEIGHT	
MODE OF TRANSPORTATION (Please check one)	
<div>Q Small package/Ground</div> <div>Q LTL(Less than truck load) NMFC Class # _____ NMFC Item # _____</div> <div>Q Truckload</div> <div>Q Air</div> <div>Q Other (Please specify)</div>	
TOTAL PRICE LESS FREIGHT (FOB Origin)	\$
TOTAL PRICE INCLUDING FREIGHT (FOB Destination)	\$

## INVITATION TO BID - INSTRUCTION AND GENERAL PROVISIONS

**1. BID PREPARATION:** (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. Errors may be crossed out and corrections printed in ink or typewritten adjacent and must be initialed in ink by person signing quotation. (c) Unit price will govern, if there is an error in the extension. (d) Delivery time is critical and must be adhered to as specified. (e) Wherever in this document an item is defined by using a trade name of a manufacturer and/or model number, it is intended that the words, "or equivalent" apply. "Or equivalent" means any other brand that is equal in use, quality, economy and performance to the brand listed as determined by the Division of Purchasing & General Services (DIVISION). If the vendor lists a trade name and/or catalog number in the bid, the DIVISION will assume the item meets the specifications unless the bid clearly states it is an alternate, and describes specifically how it differs from the item specified. All bids must include complete manufacturer's descriptive literature if quoting an equivalent product. All products are to be of new, unused condition, unless otherwise requested in this solicitation. (f) By signing the bid the vendor certifies that all of the information provided is accurate, that they are willing and able to furnish the item(s) specified, and that prices quoted are correct. (g) This bid may not be withdrawn for a period of 60 days from bid due date.

**2. SUBMITTING THE BID:** (a) The bid must be signed in ink, sealed in a properly-addressed envelope, and either mailed or delivered to the DIVISION OF PURCHASING, 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061 by the "Due Date and Time." **The "Bid Number" and "Due Date" must appear on the outside of the envelope.** (b) Bids, modifications, or corrections received after the closing time on the "Due Date" will be considered late and handled in accordance with the Utah Procurement Rules, section R33-3-109. (c) **Your bid will be considered only if it is submitted on the forms provided by the state. Facsimile transmission of bids to DIVISION will not be considered.** (d) All prices quoted must be both F.O.B. Origin per paragraph 1.(c) and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the bid for consideration and approval by the DIVISION. Upon award of the contract, the shipping terms will be F.O.B. Destination, Freight Prepaid with freight charges to be added to the invoice unless otherwise specified by the DIVISION.

**3. SOLICITATION AMENDMENTS:** All changes to this solicitation will be made through written addendum only. Bidders are cautioned not to consider verbal modifications.

**4. PROPRIETARY INFORMATION:** Suppliers are required to mark any specific information contained in their bid which is not to be disclosed to the public or used for purposes other than the evaluation of the bid. Each request for nondisclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any bid will not to be considered proprietary. Bids submitted may to be reviewed and evaluated by any persons at the discretion of the state.

**5. SAMPLES:** Samples of item(s) specified in this bid, when required by DIVISION, must to be furnished free of charge to DIVISION. Any item not destroyed by tests may, upon request made at the time the sample is furnished, to be returned at the bidder's expense.

**6. WARRANTY:** The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the

manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

**7. DIVISION APPROVAL:** Purchase orders placed, or contracts written, with the state of Utah, as a result of this bid, will not to be legally binding without the written approval of the director of the DIVISION.

**8. AWARD OF CONTRACT:** (a) the contract will to be awarded with reasonable promptness, by written notice, to the lowest responsible bidder that meets the specifications. Consideration will to be given to the quality of the product(s) to be supplied, conformity to the specifications, the purpose for which required, delivery time required, discount terms and other criteria set forth in this invitation to bid. (b) The bids are opened publicly in the presence of one or more witnesses. the name of each bidder, and the amount of the bid is recorded. Each bid, and the record, is open to public inspection. (c) The DIVISION may accept any item or group of items, or overall low bid. the DIVISION has the right to cancel this invitation to bid at any time prior to the award of contract. (d) The DIVISION can reject any and all bids. And it can waive any informality, or technicality in any bid received, if the DIVISION believes it would serve the best interest of the State. (e) Before, or after, the award of a contract the DIVISION has the right to inspect the bidder's premises and all business records to determine the holder's ability to meet contract requirements. (f) DIVISION does not guarantee to make any purchase under awarded contract(s). Estimated quantities are for bidding purposes only, and not to be interpreted as a guarantee to purchase any amount. (g) Utah has a reciprocal preference law which will to be applied against bidders bidding products or services produced in states which discriminate against Utah products. For details see Section 63-56 20.5 -20.6, Utah Code Annotated.

**9. ANTI-DISCRIMINATION ACT:** The bidder agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also bidder agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.

**10. DEBARMENT:** The CONTRACTOR certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the CONTRACTOR cannot certify this statement, attach a written explanation for review by the STATE.

**11. GOVERNING LAWS AND REGULATIONS:** All state purchases are subject to the Utah Procurement Code, Title 63 Chapter 56 U.C.A. 1953, as amended, and the Procurement Regulations as adopted by the Utah State Procurement Policy Board. These are available on the Internet at [www.purchasing.utah.gov](http://www.purchasing.utah.gov)

(Revision 14 Mar 2003 - IFB Instructions)

**PURCHASE ORDER CONTRACT: TERMS AND CONDITIONS**

ACCEPTANCE OF THIS PURCHASE ORDER BINDS THE CONTRACTOR TO ALL THESE TERMS AND CONDITIONS AND ALL THE TERMS, CONDITIONS AND PROVISIONS INCLUDED IN THE SOLICITATION THE DIVISION OF PURCHASING OFFERED RELATING TO THIS PURCHASE ORDER.

1. **AUTHORITY:** Provisions of this Purchase Order are pursuant to the authority set forth in the Utah Procurement Code, 63-56, Utah Code Annotated (U.C.A.) 1953, as amended, and the Utah State Procurement Rules and Regulations. Any and all supplies, services and equipment furnished will comply fully with all applicable Federal and State laws and regulations.
2. **CONTRACT JURISDICTION, CHOICE OF LAW, AND VENUE:** The provisions of this Purchase Order shall be governed by the laws of the State of Utah. The parties will submit to the jurisdiction of the courts of the State of Utah for any dispute arising out of this Purchase Order or the breach thereof. Venue shall be in Salt Lake City, in the Third Judicial District Court for Salt Lake Co.
3. **CONFLICT OF INTEREST:** Contractor represents that none of its officers or employees are officers or employees of the State of Utah, unless disclosure has been made in accordance with 67-16-8, U.C.A., 1953, as amended. Further, Contractor certifies that it has not offered or given any gift or compensation prohibited by 67-16-5, U.C.A., 1953, as amended, to any officer or employee of the State of Utah to secure favorable treatment with respect to being awarded this Purchase Order.
4. **INDEPENDENT CONTRACTOR:** Contractor shall be an independent contractor, and as such shall have no authorization, express or implied to bind the State of Utah to any agreements, settlements, liability or understanding whatsoever, and agrees not to perform any acts as agent for the State, except as expressly set forth herein.
5. **INDEMNITY:** Contractor agrees to indemnify, save harmless and release the State of Utah, including all state officers, agents and employees from and against any and all loss, damages, injury, liability, suits and proceedings arising out of the performance of this contract by the Contractor, its officers, agents, volunteers, employees or subcontractors.
6. **EQUAL OPPORTUNITY CLAUSE:** Contractor agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A., 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color or national origin and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990 which prohibits discrimination on the basis of disabilities. Also, Contractor agrees to abide by Utah's Executive Order, dated March 17, 1993 which prohibits sexual harassment in the workplace. Contractor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.
7. **DEBARMENT:** The Contractor certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the Contractor cannot certify this statement, attach a written explanation for review by the STATE.
8. **CANCELLATION OR REVISION:** This Purchase Order may be changed, revised or canceled only by the Division of Purchasing giving written notice to the Contractor.
9. **SALES TAX EXEMPTION:** The State of Utah's sales and use tax exemption number is **E33399**. The tangible personal property or services being purchased are being paid from State funds and used in the exercise of that entity's essential functions. If the items being purchased are construction materials, they will be converted into real property by employees of this government entity, unless sales tax is included as a separate line item on this purchase order.
10. **WARRANTY:** The Contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The Contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah apply to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the Contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the Contractor's skill or judgment to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The Contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the Contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the Contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.
11. **PRICING AND INVOICING:** Prices to be paid for item(s) ordered are the prices listed on this Purchase Order, which include all shipping and delivery charges, unless otherwise described on this order. **CONTRACTOR WILL, AFTER DELIVERY, PROMPTLY SUBMIT A CORRECT INVOICE TO THE ORDERING AGENCY.** Contractor agrees that the state has a right to adjust any invoice that reflects incorrect pricing. Unless otherwise specified, payment terms shall be Net 30 days. Where prompt payment discounts apply, the period for computing a discount shall begin on the date a correct invoice, including any adjustment for damage or incomplete shipment, is received by the state. Discount will be taken on the total amount of the invoice.
12. **DELIVERY:** Orders must be shipped directly to ordering agency at address specified. Shipments must be made in accordance with the item(s) as described and priced on this order. Also, orders must be shipped F.O.B. Destination, Freight Prepaid, unless other shipping instructions are described in this order. **UNLESS INDICATED OTHERWISE, ALL ORDERS MUST BE SHIPPED PROMPTLY (WITHIN 5 WORKING DAYS), UPON RECEIPT OF ORDER.** All items listed on this Purchase Order are subject to the approval of the ordering agency. Items rejected by ordering agency for not conforming to specifications in this order shall be at Contractor's risk.
13. **PURCHASE ORDER NUMBER:** PURCHASE ORDER NUMBER must be clearly shown on shipping labels, packing slips, invoices and correspondence relating to this purchase.
14. **PATENTS, COPYRIGHTS, ETC.:** The Contractor shall release, indemnify and hold the Buyer, its officers, agents and employees harmless from any liability of any kind or nature, including the Contractor's use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of this contract.
15. **PUBLIC INFORMATION:** Contractor agrees that the purchase order and any response to related bids will be public documents, as to distribution of copies, and Contractor gives the STATE express permission to make copies of the purchase order, bid response, related sales orders, and invoices in accordance with the State of Utah Government Records Access and Management Act. The permission to make copies as noted will take precedence over any statements of confidentiality, proprietary information, copyright information, or similar notation.

STATE OF UTAH  
DEPARTMENT OF TRANSPORTATION  
FACILITIES MAINTENANCE

NEW SALT STORAGE BUILDING  
PAROWAN, UTAH  
UDOT JOB NUMBER 81L54554

PROJECT DESCRIPTION

This project is to build a new salt storage facility to be constructed at UDOT maintenance station 4526 in Parowan, Utah per this description and the attached drawings and specification.

The scope of work includes the construction of a complete building per the requirements contained in the attached drawings and specification. The Owner will stake the location of the building and set the floor elevation. The contractor will be responsible to verify all existing conditions prior to the bid. The contractor will be responsible for construction of the building. The Owner will be responsible for floor subbase placement and asphalt paving. Except for work designated to be done by the Owner, the contractor will be responsible for work done within the building footprint.

It is recommended that potential bidders visit the site. Visits can be arranged through Ryan Orton, Station Supervisor, phone number (435) 477-3715. Questions during the bid period can be addressed to William E. Juszczak, phone number (801) 964-4522. All questions will be required to be submitted by one week before the bid date. For bid processing questions, contact Paul F. Mash at (801) 538-3138.

STATE OF UTAH  
DEPARTMENT OF TRANSPORTATION  
FACILITIES MANAGEMENT

SPECIFICATION FOR SALT STORAGE BUILDING  
PAROWAN, UTAH

19 November 2004

**GENERAL SPECIFICATIONS**

**BID**

*BIDDER* \_\_\_\_\_

Submit Utah *INVITATION TO BID* with all required information.

Having examined the Contract Documents and the site of the proposed work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, I/We hereby propose to furnish all labor, materials, and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. The price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this proposal is a part.

I/We acknowledge receipt of the following Addenda:

For the work described in the specifications and Contract Documents and as described herein, I/we agree to perform the all of the work indicated for the sum of:

\_\_\_\_\_ Dollars(\$\_\_\_\_\_)  
(In case of discrepancy, written amount shall govern)

**TIME OF COMPLETION AND DELAY REMEDY**

The project shall be substantially complete by May 1, 2005. Contractor agrees to pay liquidated damages in the amount of \$100 per day for each day after the expiration of the Contract Time until the Contractor achieves Substantial Completion.

**PAYMENT**

Progress payments may be requested at no less than 30 day intervals. Final payment will be made when the project is complete and approved by the Owner.

For prompt payment, mail invoice to: William E. Juszczak

## SPECIFICATIONS – PAROWAN SALT STORAGE

Facilities Manager  
UDOT Maintenance Division  
Box 148250  
Salt Lake City, Utah 84114-8250

### **BID BOND**

A 5% bid bond or cashier's check must be included with the bid.

### **PERFORMANCE AND PAYMENT BOND**

At the time of the execution of the contract, the contractor shall provide a performance and payment bond for 100% of the total purchase price of the contract guaranteeing performance, product and payment. (A cashier's check for the above amount may be substituted for the performance and payment bonds.)

### **WORKERS COMPENSATION**

The contractor will be required to furnish proof that all employees involved in this project are covered by Workmen's Compensation. The State will not be liable for injuries incurred during this project.

### **INSURANCE**

Before contract award, successful bidder must provide a certificate of insurance certifying that the contractor will provide and maintain a policy of insurance in which the Department of Transportation is named as an additional insured. Coverage shall be in the following amounts:

1. \$250,000 for bodily injury
2. \$500,000 for each accident occurrence
3. \$100,000 for property damage

If the contractor cannot obtain this insurance, the contractor shall provide a policy with a minimum coverage of \$1,000,000 in the aggregate.

The certificate must also state that no cancellation or decrease in coverage shall be made without giving the State at least 30 days prior written notice.

### **SAFETY**

Contractor shall comply with the current edition of the *Utah Department of Transportation Safety and Health Manual*. Copies may be downloaded from the web site [www.utah.gov/esd/esdmenu2a.htm](http://www.utah.gov/esd/esdmenu2a.htm) . Owner intends to inspect the job site monthly for



## **SPECIFICATIONS – PAROWAN SALT STORAGE**

compliance with the standard. Failure to comply with the requirements of the cited manual may result in the Owner issuing a cease and desist order until such time as the noted violations are corrected. Contractor will be held responsible for all costs resulting from safety violations.

## **MATERIALS**

Material furnished to the State of Utah shall be certified as new and must meet all current State and Federal applicable building codes and safety regulations. Bids shall include all materials and equipment necessary for complete finished construction.

## **MATERIAL TESTING**

Owner will pay for all material testing. Material testing will be as required by the current adopted building code. Provide copies to the Owner. Coordinate material testing with Kurt Baxter, DFCM, phone (801) 538-3174.

## **SPECIAL INSPECTION**

Owner will pay for all required special inspection. Special inspection shall be as required by the current adopted building code for all materials used in this project. Provide copies to the Owner. Coordinate special inspections with Kurt Baxter, DFCM, phone (801) 538-3174.

## **WARRANTY**

Contractor shall provide a general written one year warranty for the replacement of all defective materials, including labor and travel, that are used in this project. See specific specification sections for other warranties.

## **BUILDING CODES**

The building shall be designed and constructed according to all applicable State, Local and National Codes.

## **BUILDING PARAMETERS**

It is the intent of this contract to build a salt storage facility that meets all of the stated size requirements and material requirements of this specification. Unless approved by the Owner prior to bid, only the materials listed in the specification may be used. If the bidder wishes to use materials in lieu of those listed, bidder must obtain approval prior to bid. All accepted alternate materials will be issued in an addendum a minimum of one week prior to bid. Bidder must submit substitution request to Owner in time to meet this deadline. All requests which are not received in time for the scheduled addendum will be rejected. Upon

## **SPECIFICATIONS - PAROWAN SALT STORAGE**

award of bid, only materials listed in this specification or materials that have been given prior approval for this project will be allowed. Any other submittals provided after award of bid will be rejected.

All submittals which meet the above criteria will be considered responsive.

### **DIMENSIONS**

The building footprint shall be 50 feet by 80 feet. The building shall be a three sided structure. The front of the building shall be one of the 50 foot sides and shall be 100% open in plan dimension. The retaining wall shall be 10 feet high (top of wall @ elevation 110'-0"). For the purpose of establishing the wall height, the floor elevation which is to be set by the Owner shall be considered elevation 100'-0". The inside of the retaining wall shall be flush, no column protrusions, etc. See attached drawings for details.

### **DESIGN PARAMETERS**

The building shall meet the following criteria.

- It is intended to construct a building of the footprint size, retaining wall height and materials indicated in the attached drawings.
- Contractor may propose an alternate method of construction other than those listed. Any proposed alternate methods of construction not listed must be submitted prior to bid for approval. Approved alternate methods of construction will be issued as an addendum.
- Retaining walls may be constructed of cast in place concrete or precast concrete. Retaining walls may be configured to be load-bearing or non-load bearing walls. The top of the retaining wall shall be provided with a sloping cap to prevent salt from accumulating on top of the wall or falling behind the wall. The cap shall be of corrosion-resistant material. Retaining walls shall be designed to retain salt stored to the full height of the retaining wall plus the amount able to be stored using the standard accepted angle of repose of salt. For wall design purposes the following standards shall be used.
  - Bulk Density - 72 lbs/ cu. ft.
  - Angle of repose - 32°
- The exterior of the building enclosure must be maintenance free. For the purposes of this bid, any structure, framing, etc. which forms the opening at the front shall be considered part of the exterior and shall meet the requirements of this section. Exposed structure is not allowed. Any structure shall be covered with the same material as the remainder of the building.
- Building enclosures, except for the retaining walls, may be constructed of concrete, wood, metal, or masonry. Materials used to comprise the interior of the structure shall not be subject to degradation from long term salt

## **SPECIFICATIONS – PAROWAN SALT STORAGE**

exposure. Other types of acceptable wall construction above the retaining wall include wood framed construction with maintenance-free exterior materials such as aluminum or vinyl siding or synthetic stucco. Acceptable roofing systems include any comprising wood or steel components. Acceptable roofing materials include standing seam metal or asphalt shingles.

- Buildings with vertical sides shall have a minimum eave height of 20 feet (Elevation 120'-0"). Buildings using arch style roofs shall be configured such that the minimum dimension to the top of the arch at the center point is 27 feet (Elevation 127'-0").
- Where cast in place concrete retaining walls are not used, the exterior of the building shall have a 2'-0" high (Elevation 102'-0") concrete stem wall. No building exterior wall finish materials shall extend below this level. Stem wall shall return corners at open front of building for width of structure.

## **FINAL PLAN SUBMITTAL**

The contractor will be required to prepare and submit complete construction plans for review and approval by the Owner. Prior to commencement of construction, contractor shall submit 3 sets of plans for review by the Owner. Construction plans shall bear stamps of licensed professionals as required by the State of Utah. If a fast-track method of construction is utilized, plans may be submitted in phases as necessary.

## **DETAIL SPECIFICATIONS**

### **LOCATION**

The building is to be constructed on UDOT owned property, Station 4526, located at 356 East Highway 271 in Parowan, Utah.

### **DESIGN LOADS**

Building design loads shall be as follows:

Roof UL90 for wind load and 43 lb./ sq. ft. ground snow load.  
Wind 70 mph, exposure "C"  
Seismic Per Code

## **SITE WORK**

## SPECIFICATIONS - PAROWAN SALT STORAGE

Contractor shall be responsible for all site work related to construction of the building only, excavation, backfilling of footing trenches, etc. Owner shall be responsible for construction related to asphalt floor.

### **EARTHWORK**

#### GENERAL

#### SECTION REQUIREMENTS

Work includes preparing and grading subgrades, excavating and backfilling for building. Unauthorized excavation consists of removing materials beyond indicated subgrade elevations or dimensions without direction by Owner. Unauthorized excavation and remedial work shall be at Contractor's expense.

Do not interrupt existing utilities serving facilities occupied by Owner. Provide temporary utility services.

#### PRODUCTS

#### MATERIALS

Satisfactory Soil: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, or other deleterious matter.

Unsatisfactory Soil: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.

Backfill and Fill: Satisfactory soil materials.

Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand, ASTM D 2940, with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.

Bedding: Subbase materials with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.

Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, ASTM D 448, Size 57, with 100 percent passing a 1-1/2-inch sieve and not more than 5 percent passing a No. 8 sieve.

#### EXECUTION

#### EARTHWORK

## **SPECIFICATIONS - PAROWAN SALT STORAGE**

Protect subgrades and foundation soils from softening and damage by water, freezing temperatures, or frost.

Excavate to subgrade elevations regardless of character of materials and obstructions encountered.

Excavate for structure only. Trim subgrades to required lines and grades.

Plow strip or break up sloped surfaces steeper than 1 vertical to 4 horizontal to receive fill. When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface, pulverize, moisture-condition or aerate soil, and recompact.

Place backfill and fill in layers not more than 8 inches (200 mm) in loose depth at optimum moisture content. Compact each layer under structures to 95 percent of maximum dry density according to ASTM D 1557; elsewhere to 90 percent.

Allow testing agency to inspect and test each subgrade and each fill or backfill layer and verify compliance with requirements.

Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

## **CAST-IN-PLACE CONCRETE**

Comply with latest editions of ASTM C 94; ACI 301, "Specifications for Structural Concrete for Buildings"; ACI 318, "Building Code Requirements for Structural Concrete"; and CRSI's "Manual of Standard Practice."

Engage a qualified independent testing agency to design concrete mixes.

Forms for Unexposed Finished Concrete: Plywood, lumber or metal.

Forms for Exposed Finished Concrete: Plywood, metal-framed plywood faced or metal or other acceptable panel-type materials to provide continuous, straight, smooth exposed surfaces. Furnish in largest practical sizes to minimize number of joints.

All exposed exterior corners shall have  $\frac{3}{4}$ " minimum chamfer.

Deformed Reinforcing Bars: ASTM A 615, Grade 60 (ASTM A 615M, Grade 420).

Portland Cement: ASTM C 150, Type 1.

## SPECIFICATIONS – PAROWAN SALT STORAGE

Aggregates: ASTM C 33, Class 4S.

Air-Entraining Admixture: ASTM C 260.

Chemical Admixtures: ASTM C 494

Liquid Membrane-Forming Curing Compound: ASTM C 309, clear, Type I, Class B, waterborne.

### MIXES

Proportion normal-weight concrete mixes to provide the following properties:

- Compressive Strength: 3000 psi for footings and 4000 psi for walls at 28 days.
- Slump Limit: 4 inches (100 mm) at point of placement.
- Water-Cement Ratio: 0.50 maximum at point of placement.
- Air Content: 2 to 4 percent for footings, 5 to 8 percent for walls.
- Waterproofing: Provide Xypex Admix C-Series to concrete for walls. Dosage shall be 3% of cement weight. Follow manufacturer's recommendations.

### EXECUTION

#### CONCRETING

Construct formwork and maintain tolerances and surface irregularities within ACI 347 limits of Class A for concrete exposed to view and Class C for other concrete surfaces.

Accurately position, support, and secure reinforcement.

Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.

Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placing, and curing.

Contractor will engage a testing agency to perform tests and to submit test reports.

Protect concrete from damage.

## **SPECIFICATIONS - PAROWAN SALT STORAGE**

### **WARRANTY**

Provide two year written guarantee to the Owner to promptly remove, and/or repair defective concrete (cracking, spalling, pitting or honeycombing) at Contractor's expense.

### **MASONRY**

All masonry shall be constructed by skilled masons utilizing products as manufactured by recognized companies. Tooled joints are required in all masonry construction. Masonry shall be designed for all imposed loads.

### **SPECIAL CONSTRUCTION - METAL ARCH SYSTEM**

#### **GENERAL**

#### **SECTION REQUIREMENTS**

Engineer, design, fabricate and erect the metal arch building system to withstand loads from winds, gravity, structural movement including movement thermally induced, and to resist in-service use conditions that the building will experience.  
Submit Product Data and Shop Drawings.

Warranty finish for twenty years. Warranty entire system for five years.

#### **PRODUCTS**

Metal arch system to be pre-engineered 22 ga. minimum galvalume sheets. Roof to be designed per stated design criteria. Roofing sheets to be segmented arch with fasteners to form a clear span arch. End panels to match roof panels. The materials furnished shall include the panels, bracing, fasteners, sealants, flashing and all other parts for a complete system. Coordinate end panels with overhead coiling door manufacturer.

Steel coil stock shall be zinc coated by the hot-dip process, Structural Quality, ASTM A446-90 for roll forming, Grade D (50 ksi minimum yield strength).

#### **EXECUTION**

#### **ERECTION**

The erection of the metal arch system and the installation of the accessories shall be performed in accordance with the building manufacturer's erection drawings and instruction by a qualified erector using proper tools and equipment.

## **SPECIFICATIONS – PAROWAN SALT STORAGE**

Erect panels true to line, plumb, rigid and secure to the foundation system.

Flash and seal panels at rake with rubber, neoprene or other closures to exclude weather.

Provide shapes of proper design and size to reinforce openings and to carry design loads and vibrations imposed including equipment furnished under mechanical and electrical.

Install ventilators, louvers and other sheet metal accessories in accordance with manufacturer's recommendations for positive anchorage to building and weathertight mounting.

Provide 22 gauge flashing to match panels to conceal the panel edges around openings.

## **METAL BUILDING SYSTEMS**

### **GENERAL**

### **SECTION REQUIREMENTS**

Submit Shop Drawings and Product Data.

Two sets of documentation are required including:

- assembly plans and drawings
- structural calculations
- foundation plan with anchor bolt layout
- replacement parts lists
- warranties

### **PRODUCTS**

### **GENERAL**

Provide a complete, integrated set of metal building system manufacturer's standard mutually dependent components and assemblies that form a metal building system capable of withstanding structural and other loads, thermally induced movement, and exposure to weather without failure or infiltration of water into building interior. Includes primary and secondary framing, roof and wall panels, and accessories complying with requirements indicated.

### **BUILDING MANUFACTURERS**



## SPECIFICATIONS - PAROWAN SALT STORAGE

Available manufacturers: Any manufacturer that meets the required qualifications as outlined in this specification is approved for bidding.

Primary Frame Type: Rigid Clear Span, solid member structural framing without interior columns. Minimum plate thickness shall be  $\frac{1}{4}$ " or structural steel shapes. Frame configuration shall be one-directional sloped. Exterior columns and rafters shall be tapered type.

End Wall Framing: Manufacturer's standard for buildings not required to be expandable. Primary frame to be capable of supporting one-half of a bay design load. To have flush framed girts. End wall and corner columns shall be I-shaped sections fabricated from structural steel shapes, shop-welded, built-up steel plates or C-shaped cold formed structural steel sheet. Minimum thickness shall be  $\frac{1}{8}$ ". End wall rafters shall be C-shaped cold formed structural steel sheet with minimum thickness of 0.0598".

Secondary Framing: Manufacturer's standard secondary framing members, purlins, girts, eave struts, flange brace base members, gable angles, clips, headers, jambs and other miscellaneous structural members. Fabricate from cold-formed, structural steel sheet or roll-formed, metallic-coated steel sheet prepainted with coil coating.

Purlins and Girts: C- or Z-shaped sections, minimum 0.0598" thick, with minimum  $2\frac{1}{2}$ " wide flanges.

Eave Struts: Unequal-flange, C-shaped sections, minimum 0.0598" thick.

Flange and Sag Bracing: Minimum  $1\frac{5}{8}$ " x  $1\frac{5}{8}$ " structural steel angles, minimum 0.0598" thick.

Base or Sill Angles: Minimum 3" x 2" zinc-coated steel sheet, minimum 0.0747" thick.

Purlin and Girt Clips: Zinc-coated steel sheet, minimum 0.0747" thick.

Secondary End Wall Framing: Manufacturer's standard sections fabricated, zinc-coated steel sheet, minimum 0.0747" thick.

Framing for Openings: Channel shapes, minimum 0.0598" thick.

Miscellaneous Members: Manufacturer's standard sections.

Eave height: Manufacturer's standard height, but not less than shown on drawings.

Roof Assembly: Manufacturer's standard standing seam roof panels.

## SPECIFICATIONS – PAROWAN SALT STORAGE

Exterior Wall System: Manufacturer's standard field-assembled insulated wall panels.

Manufacturer's Qualifications: Member of MBMA. AISC Certification for Category MB.

Source Limitations: Obtain each type of metal building system component through one source from a single manufacturer.

Structural Steel: Comply with AISC S355 or AISC S342.

Cold Formed Steel: Comply with AISI SG-671 and AISI SG-911.

Warranties: Written five year warranty, executed by manufacturer agreeing to repair or replace roof or wall panels that fail in materials and/or workmanship.

Written twenty year warranty, signed by the manufacturer agreeing to repair finish or replace roof or wall panels that show evidence of deterioration of factory-applied finishes. Deterioration of finish includes but is not limited to color, fade, chalking, cracking, peeling and loss of film integrity.

## STRUCTURAL FRAMING MATERIALS

Structural Steel Shapes: ASTM A 36/A 36M or ASTM A 529/A 529M.

Steel Plate, Bar or Strip: ASTM A 529/A 529 M, ASTM A 570/A 570M or ASTM 572/A 572 M. 50,000 psi minimum yield strength.

Steel Tubing or Pipe: ASTM A 500, Grade B or ASTM A 53, Grade B.

Structural Steel Sheet: Hot-rolled, ASTM A 570/A 570M, Grade 50 or 55; hot-rolled ASTM 568/A 568M or; cold-rolled ASTM A 611 structural quality, matte (dull) finish.

Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653 M, structural quality, Grade 50 with G60 (Z180) coating designation, mill phosphatized.

Metallic-Coated Steel Sheet Prepainted with Coil Coating: Steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A. Zinc-Coated (Galvanized) Steel Sheet to comply with ASTM A 653/A 653 M coating designation, structural quality.

High-Strength Bolts, Nuts and Washer: ASTM A 325 325 M, Type 1, heavy hex steel structural bolts, heavy hex carbon-steel nuts and hardened carbos-steel washers. Finish shall be hot-dip zinc coating, ASTM A 153, Class C. Minimum size bolts for primary systems shall be  $\frac{5}{8}$ " diameter.

## SPECIFICATIONS - PAROWAN SALT STORAGE

Anchor Rods, Bolts Nuts and Washers: Unheaded bolts, ASTM A 572/A 572 M, Grade 50. Headed bolts, ASTM A 325 325 M, Type 1 heavy hex steel structural bolts and heavy hex carbon-steel nuts. Washers, ASTM A 36/A 36M.

Bracing Rods: ASTM A 36/A, ASTM A 572/A 572M Grade D or ASTM A 529/A 529 M Grade 50. Rods shall be 1/2" minimum diameter with 12" minimum threaded end. Cable bracing is not allowed.

Primers: Manufacturer's standard, lead- and chromate- free, nonasphaltic, rust-inhibiting primer.

## PANEL MATERIALS

Metallic-Coated Steel Sheet Prepainted with Coil Coating: Steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A. Zinc-Coated (Galvanized) Steel Sheet to comply with ASTM A 653/A 653 M coating designation, structural quality. Yield strength, 50,000 psi.

Roof Panels: Minimum thickness, 24 gauge. Panels shall be 24" wide with 3 inch high raised major ribs at panel edges and intermediate stiffening ribs symmetrically placed between major ribs for full panel length. Joint type shall be folded, mechanically seamed type. Clip system shall be floating type to accommodate thermal movement. Surface shall be smooth, flat mill finish.

Exterior Finish: Manufacturer's standard two-coat, thermocured system, consisting of specially formulated inhibitive primer and flouropolymer color topcoat containing not less than 70 percent polyvinylidene flouride resin by weight, with a total minimum dry film thickness of 1 mil and 30 percent reflective gloss when tested according to ASTM D 523. Provide coating field tested under normal range of weather conditions for a minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish; with chalking in excess of a chalk rating of 8 according to ASTM D 4214 and without fading in excess of five Hunter units.

Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored backer finish, consisting of prime coat and wash coat with a total minimum dry film thickness of 0.5 mil.

Roof Panel Accessories: Provide components required for a complete roof panel assembly including trim, copings, fasciae, mullions, sills, corner units, ridge closures, clips, seam covers, battens, flashings, gutters, sealants, gaskets, fillers, closures strips and similar items. Match materials and finishes of panels.

## SPECIFICATIONS - PAROWAN SALT STORAGE

Wall Panels: Provide manufacturer's standard panels fabricated from metallic-coated steel sheets prepainted with coil coating, factory formed to provide 36 inch coverage, with raised major ribs at 12" o.c. and intermediate stiffening ribs symmetrically placed between major ribs for the full panel length. Minimum material thickness, 24 gauge. Minimum panel thickness, 1 1/8".

Wall Panel Accessories: Provide components required for a complete wall panel assembly, including trim, copings, mullions, sills, corner units, clips, seam covers, battens, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match materials and finishes of panels.

Exterior Finish: Manufacturer's standard two-coat, thermocured system, consisting of specially formulated inhibitive primer and fluoreopolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight, with a total minimum dry film thickness of 1 mil and 30 percent reflective gloss when tested according to ASTM D 523. Provide coating field tested under normal range of weather conditions for a minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish; with chalking in excess of a chalk rating of 8 according to ASTM D 4214 and without fading in excess of five Hunter units.

Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored backer finish, consisting of prime coat and wash coat with a total minimum dry film thickness of 0.5 mil.

Fascia and Soffit Panels: Match roof panel profile and material. Fabricate flat-pan panels from metallic coated steel sheets prepainted with coil coating, factory formed to provide 16-inch coverage with 1-inch high, inverted-L, standing seam vertical ribs at panel edges.

Accessories: Provide accessories as standard with metal building system manufacturer. Accessories shall be of the same material and in same finish as roof and wall panels.

Fasteners: Roofing to be installed with clips per manufacturers standard. No fasteners to penetrate roof panels. Other fasteners shall be self-drilling or self-tapping 410 stainless or zinc-alloy steel hex washer head, with EPDM or PVC washer under head if fastener bearing on weather side of panel. Fasteners for flashings and trim shall be blind fasteners of high-strength aluminum or stainless-steel rivets or, self-drilling screws with hex washer head.

Flashing and Trim: Minimum 0.0179 thick material. Provide as required to seal against weather and to provide finished appearance.

## MISCELLANEOUS MATERIALS

Cold-applied asphalt mastic, SSPC-Paint 12, 15 ml dry film thickness.

## SPECIFICATIONS - PAROWAN SALT STORAGE

Premixed, nonmetallic, noncorrosive, nonstaining, grout, ASTM C 1107.

Zinc dust, zinc oxide primer, FS TT-P-641 for galvanized metal surfaces.

### EXECUTION

#### GENERAL

Erect metal building system according to manufacturer's written instructions and erection drawings.

#### ROOF PANEL INSTALLATION

Provide roof panels of full length from eave to ridge. Install panels perpendicular to purlins.

Field cutting by torch is not permitted.

Rigidly fasten eave end and allow ridge end free movement.

Fasten roof panels to purlins with concealed clips at each standing seam joint. Install clips at manufacturer's recommended spacing.

Provide weatherseal under ridge cap.

Flash and seal roof panels.

#### WALL PANEL INSTALLATION

Provide wall panels of full length from base to eave. Install panels perpendicular to girts.

Begin panel installation from corner.

Field cutting by torch is not permitted.

Align bottom of wall panels and fasten with blind rivets, bolts or self-tapping screws.

Provide weather-resistant escutcheons for wall penetrations.

Flash and seal wall panels.

Apply elastomeric sealant continuously between metal base channel and concrete and elsewhere as required.

## **SPECIFICATIONS - PAROWAN SALT STORAGE**

### **FASCIA and SOFFIT INSTALLATION**

Provide full width panels. Install panels perpendicular to supports.

Field cutting by torch is not permitted.

Fasten panels with self-tapping screws.

Align bottom of fascia panels and fasten with blind rivets, bolts or self-tapping screws. Flash and seal panels with weather closures where fasciae meet soffits, along lower panel edges and at perimeter if all openings.

### **CLEANING**

Immediately after erection, clean, prepare and prime or reprime welds, bolted connections and abraded surfaces of prime-painted primary and secondary framing, accessories and bearing plates.

Repair damaged galvanized coatings or exposed surfaces with galvanized repair paint.

Replace panels that have been damaged or have deteriorated beyond successful repair.

### **SELF-SUPPORTING METAL BUILDING**

Self-supporting metal building to be pre-engineered 22 ga. minimum galvalume sheets. Building to be designed per stated design criteria. Roofing/wall sheets to be segmented with fasteners to form a clear span. End panels to match roof panels. Provide frame as required for openings (doors, vents, etc.). The materials furnished shall include the panels, bracing, fasteners, sealants, flashing and all other parts for a complete system.

### **ELECTRICAL**

#### **GENERAL**

#### **SECTION REQUIREMENTS**

#### **PRODUCTS**

Provide and install the following; one weatherproof disconnect mounted on the exterior of the building with 2, 20 amp circuits; provide one outlet in disconnect. Provide 2, 20 amp breakers in nearest available existing panel. Contractor shall provide power to building. Contractor is responsible to verify existing conditions and provide the necessary construction in order to provide power to building.

### SPECIFICATIONS - PAROWAN SALT STORAGE

Contractor to field verify location of panel with Owner. Provide 3 Lithonia fixtures, catalog # TX400S A26-120-SF-CRT-LCPP-PPH or equal, equally spaced mounted inside at top of building and 1 Lithonia fixture, catalog # TWP 150S-120-DMP or equal at front of building. All lights to be switched. Switch to be waterproof.

### EXECUTION

Installation shall be per latest edition of the NEC.

Installation shall be complete from the panel, including riser to panel. Installation shall include all conduit, boxes, fixtures, switches, etc for a complete installation. Contractor will make connection to panel.



Site Photographs





## SPECIFICATIONS - PAROWAN SALT STORAGE



GENERAL

01. SOURCE  
THESE NOTES ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC NOTATIONS TO THE CONTRARY.
02. APPLICABLE SPECIFICATIONS AND CODES  
DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CODE ADOPTED BY THE STATE OF UTAH. THE ABOVE SHALL GOVERN EXCEPT WHERE THE APPLICABLE CODES OR THE FOLLOWING NOTES ARE MORE RESTRICTIVE.
03. ALTERNATE DESIGNS  
THESE ALTERNATE SYSTEMS AND DETAILS ON THESE PLANS ARE THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR MAY USE ALTERNATE DESIGNATION APPROVAL.
04. DIMENSIONS  
STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
05. CONSTRUCTION LOADS  
STRUCTURES SHALL BE DESIGNED FOR GRAVITATIONAL SUPPORTS, ON COMPOSITE STRUCTURES. DURING CONSTRUCTION, STRUCTURES SHALL BE PROTECTED BY BRACING AND BRACING WHEREVER EXCESSIVE LOADS MAY OCCUR.
06. DESIGN LEVEL LOADS  
A. ROOF: 43 PSI SNOW LOAD  
B. WIND: 70 MPH EXPOSURE "C"  
C. SLAB: PER CODE
07. REINFORCEMENT VARIATIONS  
A. VARIATIONS SHOWN ON STRUCTURAL DRAWINGS ARE REFERENCED FROM A FINISHED FLOOR ELEVATION OF 100.00

SOILS

51. FOUNDATION DESIGN FOR STRUCTURES IS BASED UPON CODE ALLOWABLE FOUNDATION AND SOIL PRESSURE
52. GEOTECHNICAL  
A. ALLOWABLE SOIL BEARING PRESSURE: 1,500 PSF  
B. PASSIVE AT-RISK EARTH PRESSURE: 100 PSF/FT  
C. CONTRACTOR TO PROVIDE VERIFICATION OF ASSUMED SOIL BEARING CAPACITY ASSUMED
53. USE OF HEAVY TRACTOR-TOWED ROLLER COMPACTION EQUIPMENT WILL NOT BE ALLOWED WITHIN 5 FEET OF WALLS.

CONCRETE

01. APPLICABLE CODE  
CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI 308 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
02. REINFORCING STEEL DETAILS  
A. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED SHALL BE IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 318), LATEST EDITION.
03. SIGN STRING IS  
A. COMPRESSION SLAB (28 DAYS):  
FOOTINGS:  $f'_c = 5,000$  PSI  
ALL OTHERS:  $f'_c = 4,000$  PSI  
B. REINFORCING: #4 AND LARGER: GRADE 60  
#3: GRADE 40
04. CONCRETE COVER  
CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS WITH MINIMUM COVER OF ONE BAR DIAMETER, AND:  
A. CONCRETE CAST AGAINST EARTH: 3 INCHES.  
B. CONCRETE TO BE IN CONTACT WITH EARTH OR WEATHER:  
1. BARS GREATER THAN #4: 2 INCHES.  
2. BARS #5 OR FEWER: 1-1/2 INCHES.  
C. CONCRETE TO EXPOSE TO EARTH OR WEATHER:  
1. BEAMS, WALLS: 2 INCHES.  
2. BEAMS, COLUMNS (PRIMARY REINFORCING, STIRRUPS, SPIRALS): 1-1/2 INCHES.
05. BARS LAP SPICES AND LAPS SHALL BE IN ACCORDANCE WITH THE FOLLOWING: LAPS SHALL BE SPACED AS BARS WITH WHICH THEY ARE APPLIED, UNLESS OTHERWISE NOTED. ALL BAR SPICES SHALL BE LAPPED, OR LAPPED, AS FOLLOWS UNLESS OTHERWISE NOTED.

GRADE 40 OR 60 REINFORCEMENT: MINIMUM INCHES										
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11	
REGULAR BARS	24	24	24	36	48	60	76	92	119	
TOP BARS	24	26	31	44	59	78	99	126	157	

TOP BARS ARE ORIENTED BARS WITH MORE THAN 1/2" OF CONCRETE CAST IN A SINGLE POUR BELOW THE BAR, ADD 25% TO ALL LAP SPICES FOR BAR SPACING LESS THAN 6".

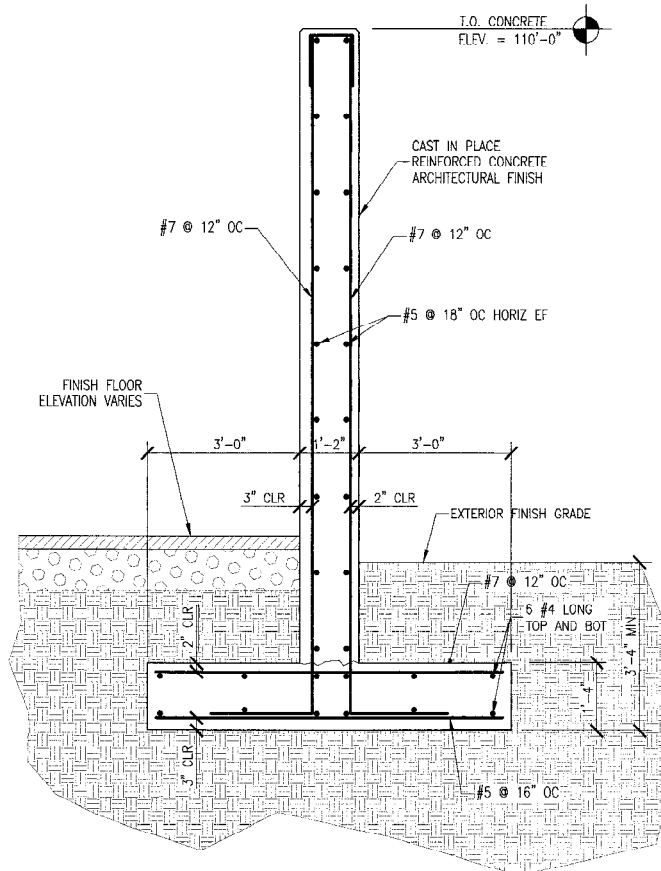
06. STANDARD HOOKS  
BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-08 SECTION 12.5.

ALUMINUM

- A1. ALUMINUM IN CONTACT WITH CONCRETE  
WHERE ALUMINUM IS IN CONTACT WITH CONCRETE OR MASONRY SURFACES, CORROSION RESISTANT ALUMINUM SHALL BE COATED WITH AN ANODIZING AND/OR AN INHIBITOR.

STEEL

- S1. APPLICABLE CODE  
STEEL CONSTRUCTION SHALL CONFORM TO SPECIFICATIONS AND STANDARDS PRESENTED IN THE 9th EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.
- S2. MATERIAL  
STRUCTURAL STEEL SHALL BE AS SPECIFIED AND BOLTS SHALL BE ASTM A307.
- S3. WELDING  
WELDING SHALL BE DONE BY A CERTIFIED WELDER IN ACCORDANCE WITH AISC AND AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION.
- S4. SPECIAL INSPECTION  
SPECIAL INSPECTION AS REQUIRED BY CODE.

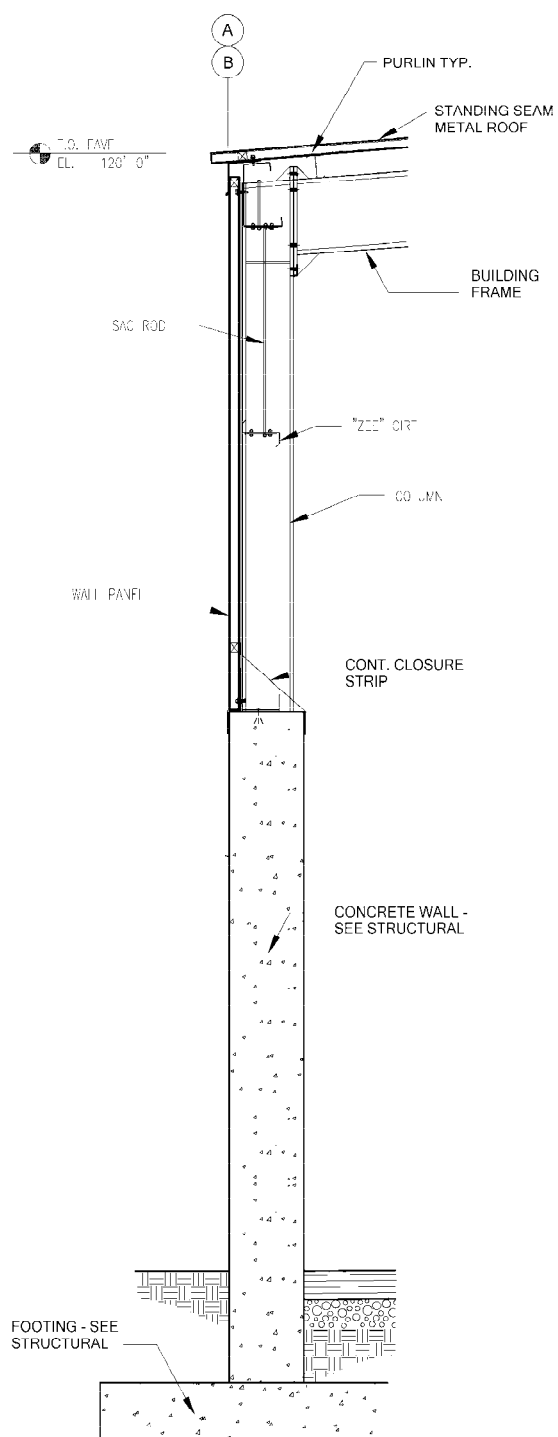


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S-1

# **WALL/FOOTING DETAIL**

CONTRACTOR MAY PROPOSE  
ALTERNATE DETAIL.

CONTRACTOR SHALL VERIFY  
THAT WALL DESIGN  
IS COMPATIBLE WITH & OF  
ADEQUATE DESIGN  
FOR STRUCTURE PROVIDED.



1 SIDE WALL SECTION  
A-2 REAR WALL SIM.

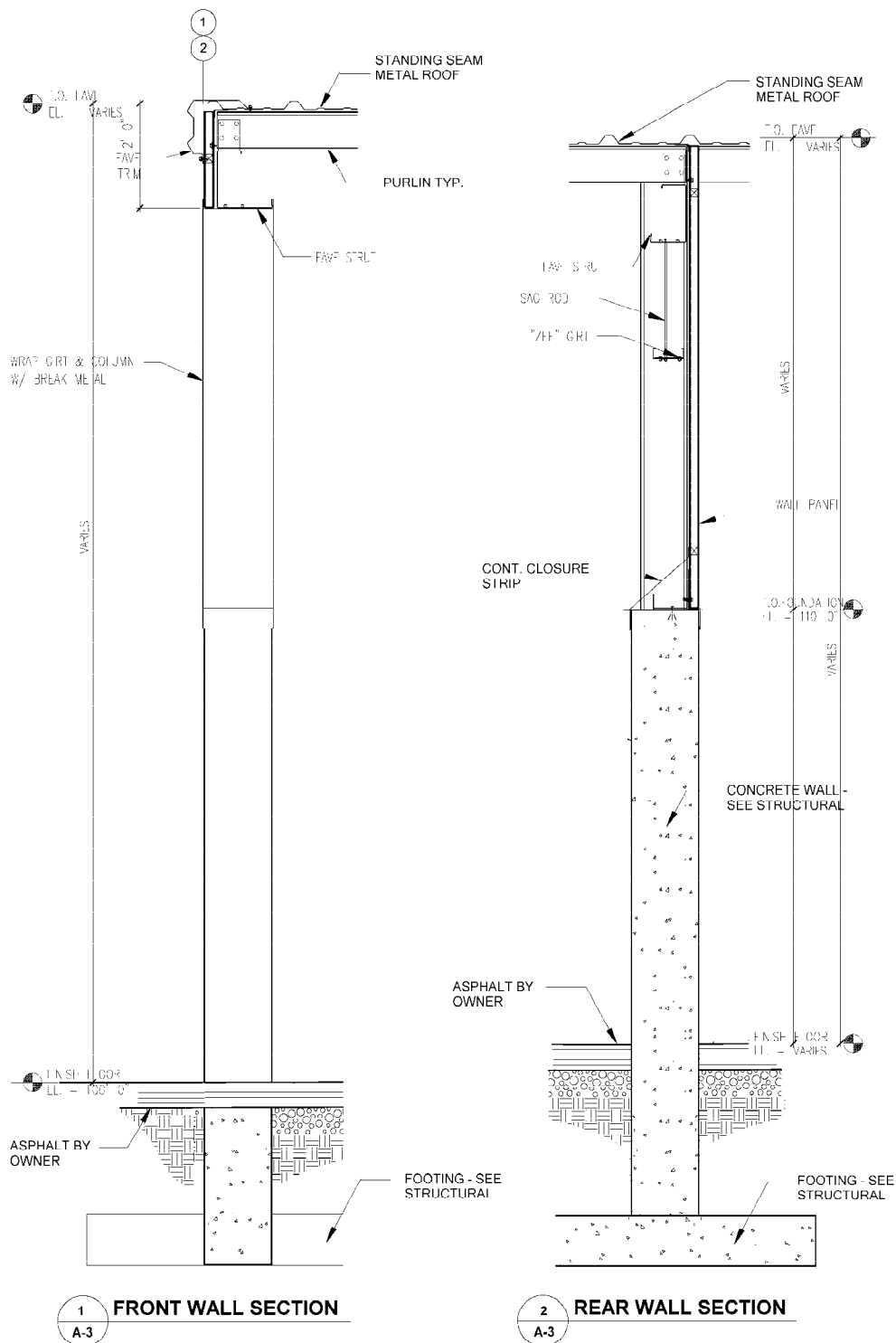
A-2

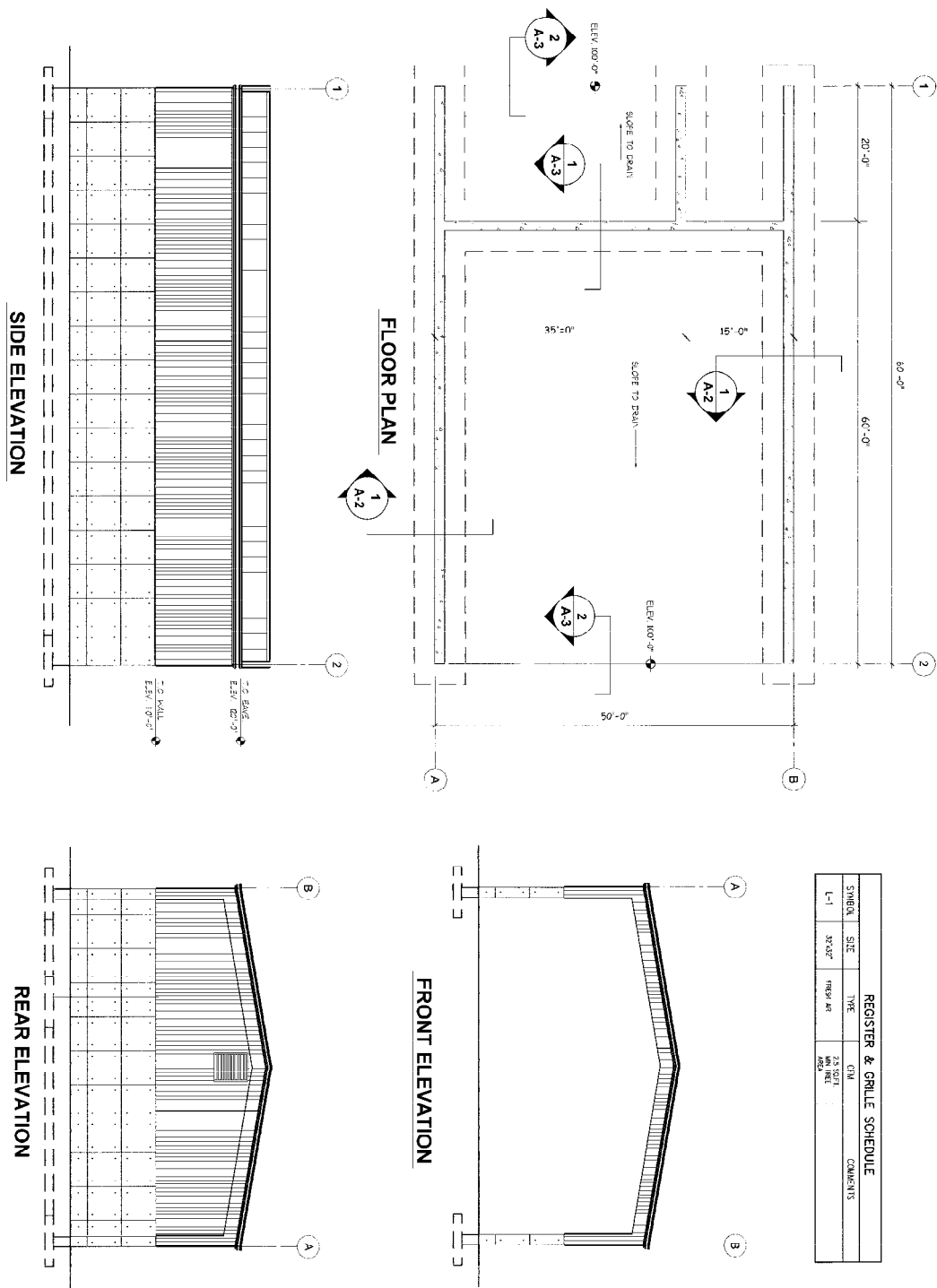
19 November 2004

## NEW SALT STORAGE BUILDING

for

UTAH DEPARTMENT OF TRANSPORTATION  
STATION 4526 PAROWAN





**NEW SALT STORAGE BUILDING**  
for  
UTAH DEPARTMENT OF TRANSPORTATION  
STATION 4526  
PAROWAN

STATE OF UTAH  
DIVISION OF PURCHASING

**BOND STATEMENT**

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**BIDDING REQUIREMENTS**

A 5% bid bond or cashier's check is required by all vendors bidding on this project. The bid bond must be attached to bid or it will be disqualified. Checks submitted will be returned certified mail after an official award has been made.

**AWARD REQUIREMENTS**

A 100% performance/payment bond will be required from the award vendor within 14 days after notification of award. Bonds must be in the form of a cashiers checks (no personal or business checks) or a surety bond from a licensed surety company doing business in the State of Utah.

Performance/payment bonds (or checks) will be **held as security for a period of 12 months after completion of project, per state law.** Checks submitted will be returned certified mail only after this specified time. Bidders name must be the same on both the bid forms and all bonds submitted.

Please indicate which method of bonding will be used if awarded this job:

\_\_\_\_\_ 100% CASHIERS CHECK

\_\_\_\_\_ 100% PERFORMANCE/PAYMENT BOND

Bond/Ins. Company\_\_\_\_\_

Agent Name\_\_\_\_\_

Fax #\_\_\_\_\_ Phone #\_\_\_\_\_

Upon awarding, the requesting agency will fax a verification to the bonding company listed above to start the bonding process. It is then the responsibility of the vendor or follow through with their bonding agent to assure the bond is processed. After the bonding company sends the bond to vendor for signatures, it is the responsibility of the vendor to mail or hand carry the original bond (no copies or faxes accepted) to the requesting agency, to the attention of the contract person listed on the bid. **No work can commence until the requesting agency has receipt of this performance/payment bond.** After this time the contract will be officially released to the award vendor.

## CONSTRUCTION TRADES LICENSING REQUIREMENTS

The State of Utah requires any person engaging in a construction trade or acting as, or representing oneself as a contractor in a construction trade for which licensure is required to be licensed **before engaging in that trade or contracting activity. It is unlawful for any unlicensed person to submit a bid for any work for which a license is required.** Any person who violates this provision **cannot be awarded or accept a contract** for the performance of the work (*1993 Utah Code Unannotated 58-55-2(32)(a), 58-55-4(1)(a), 58-55-13(1).*

### Definitions

"Construction Trade" means any trade or occupation involving construction, alteration, remodeling, repairing, wrecking or demolition, addition to, or improvement of any building, highway, road, railroad, dam, bridge, structure, excavation or other project, development, or improvement to other than personal property (1993 UCU 58-55-2(5)).

"Contractor" means any person, firm, partnership, corporation, association, or other organization...(that undertakes any work in the construction, plumbing, or electrical trade for which licensure is required...(1993 UCU 58-55-2(6)).

**Licensed Classifications** (See next page.) List the appropriate contractor license number, classification title, primary or secondary classifications number, aggregate dollar limit and license expiration date OR attach a copy of the license. If you plan to utilize sub-contractors, they must also be licensed. Please complete the sections below for each sub-contractor or attach copy of their license.

### Prime Contractor

<u>License Number</u>	<u>Expiration Date</u>	<u>Class Title</u>	<u>Class Number</u>	<u>Dollar Limit</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

### Sub-Contractor(s)

<u>License Number</u>	<u>Expiration Date</u>	<u>Class Title</u>	<u>Class Number</u>	<u>Dollar Limit</u>
<u>Name:</u> _____	_____	_____	_____	_____
<u>Name:</u> _____	_____	_____	_____	_____
<u>Name:</u> _____	_____	_____	_____	_____



## CONTRACTOR LICENSE CLASSIFICATIONS

Primary Classification Number	Subclassification Number	Title
E100		General Engineering Contractor
B100		General Building Contractor
R100		Residential and Small Commercial Contractor
	R101	Residential and Small Commercial - Nonstructural
		Remodeling and Repair Contractor
R200		Factory Built Housing Set-up Contractor
S200		General Electrical Contractor
	S201	Residential Electrical Contractor
S210		General Plumbing Contractor
	S211*	Boiler Installation Contractor
	S212	Irrigation Sprinkling Contractor
	S213	Industrial Piping Contractor
	S214*	Water Conditioning Equipment Contractor
S215		Solar Energy Systems Contractor
S216		Residential Sewer Connection & Septic Tank Contractor
S220		Carpentry Contractor
	S221*	Cabinet and Millwork Installation Contractor
S230		Metal and Vinyl Siding Contractor
	S231*	Rain-gutter Installation Contractor
S240		Glass and Glazing Contractor
S250		Insulation Contractor
S260		General Concrete Contractor
	S261*	Concrete Form Setting and Shoring Contractor
	S262*	Gunite and Pressure Grouting Contractor
S270		General Drywall, Stucco and Plastering Contractor
	S271*	Plastering Stucco Contractor
	S272*	Ceiling Grid Systems, Ceiling Tile and Light-weight
		Metal and Non-bearing Wall Partitions Contractor
S280		General Roofing contractor
	S281*	Single Ply and Specialty Coating Contractor
	S282*	Build-up Roofing Contractor
	S283	Shingle and Shake Roofing Contractor
	S284*	Tile Roofing Contractor
	S285*	Metal Roofing Contractor
S290		General Masonry Contractor
	S291*	Stone Masonry Contractor
	S292*	Terrazzo Contractor
	S293*	Marble, tile and Ceramic Contractor
S300		General Painting Contractor
S310		Excavation and Grading Contractor
S320		Steel Erection Contractor
	S321	Steel Reinforcing Contractor
	S322*	Metal Building Erection Contractor
	S323*	Structural Stud Erection Contractor
S330		Landscaping Contractor
S340		Sheet Metal Contractor
S350		HVAC Contractor
	S351	Refrigerated Air Conditioning Contractor
	S352*	Evaporative Cooling Contractor
	S353*	Warm Air Heating Contractor
S360		Refrigeration Contractor
S370		Fire Suppression systems Contractor
S380		Swimming Pool and Spa Contractor
S390		Sewer and Water Pipeline Contractor
S400*		Asphalt Paving Contractor
S410		Pipeline and Conduit Contractor
S420*		General Fencing and Guardrail Contractor
	S421*	Residential Fencing Contractor
S430*		Metal Firebox and Fuel Burning Stove Installation Contractor
S440		Sign Installation Contractor
	S441*	Non-Electrical Outdoor Advertising Sign Contractor
S450		Mechanical Insulation Contractor
S460*		Wrecking and Demolition Contractor
S470*		Petroleum System Contractor
S480*		Piers and Foundations Contractor

\*No Trade Examination is required. All applicants must take and pass the Utah Business and Law Examination if not previously taken and passed.